Vale S.A. Form 424B2 March 11, 2010

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed pursuant to Rule 424(b)(2) Registration No. 333-162822

Subject to Completion Preliminary Prospectus Supplement dated March 11, 2010

PROSPECTUS SUPPLEMENT (To prospectus dated November 3, 2009)

Vale S.A.

% Notes due

Vale S.A. (Vale) is offering aggregate principal amount of its % Notes due. Vale will pay interest on the notes annually on March of each year, beginning March , 2011. Vale will pay additional amounts related to the deduction of certain withholding taxes in respect of certain payments on the notes.

Vale may redeem the notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed and a make whole amount described under Description of the Notes Optional Redemption in this prospectus supplement plus accrued and unpaid interest on such notes to the date of redemption. Upon the imposition of certain withholding taxes, Vale may also redeem the notes in whole, but not in part, at a price equal to 100% of their principal amount plus accrued interest to the redemption date.

The notes will be unsecured obligations of Vale and will rank equally with Vale s unsecured senior indebtedness. The notes will be issued only in registered form in minimum denominations of 50,000 and integral multiples of 1,000 in excess thereof.

We have applied to list the notes on the official list of the Luxembourg Stock Exchange and have them admitted to trading on the Regulated Market of the Luxembourg Stock Exchange.

Investing in the notes involves risks that are described in the Risk Factors section beginning on page S-6 of this prospectus supplement.

This document is an advertisement for purposes of applicable measures implementing Directive 2003/71/EC (such Directive, together with any applicable implementing measures in the relevant home Member State under such Directive, the Prospectus Directive). A prospectus prepared pursuant to the Prospectus Directive (and documents incorporated by reference) will be available on the Web site of the Luxembourg Stock Exchange (http://www.bourse.lu/).

Per note Total

Public offering price(1)	%
Underwriting discount	%
Proceeds, before expenses, to Vale	%

(1) Plus accrued interest from March , 2010, if settlement occurs after that date.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the notes in registered global form only and deposit them with a common depositary for Euroclear Bank S.A./N.V., as operator of the Euroclear System and Clearstream Banking, *société anonyme* on or about March , 2010.

BNP PARIBAS Crédit Agricole CIB HSBC Santander Global Banking & Markets

The date of this prospectus supplement is March , 2010.

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RESPONSIBILITY STATEMENT

We accept responsibility for the information contained in this prospectus supplement. To the best of our knowledge and belief (having taken all reasonable care to ensure that such is the case), the information regarding Vale and the notes contained in this prospectus supplement (or incorporated by reference) is in accordance with the facts and does not omit anything likely to affect the import of such information.

INVESTOR INFORMATION

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of each of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

This communication is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth companies, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). The notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

NOTICE TO INVESTORS REGARDING LISTING PROSPECTUS

Application has been made to list the notes on the official list of the Luxembourg Stock Exchange and to admit to trading on the regulated market of the Luxembourg Stock Exchange. Documents used in connection with such listing (collectively referred to as the listing prospectus) are likely to contain similar information to that contained in this marketing document. However, it is possible that we may be required (under applicable law, rules, regulations or guidance applicable to the listing of securities or otherwise) to make in the listing prospectus certain changes or additions to or deletions from the information contained herein. Furthermore, certain events might occur or circumstances might arise between publication of this document and the listing that would require additional or different disclosure to be made in the listing prospectus. If the listing is effected, potential investors in the European Economic Area or elsewhere may wish to refer to the listing prospectus in the context of any investment decision relating to the notes.

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ENFORCEMENT OF CIVIL LIABILITIES

A final conclusive judgment for the payment of money rendered by any New York State or federal court sitting in New York City in respect of the notes would be recognized in the courts of Brazil and such courts would enforce such judgment without any retrial or reexamination of the merits of the original action only if such judgment has been ratified by the Brazilian Superior Court of Justice (*Superior Tribunal de Justiça*). This ratification is available only if:

the judgment fulfills all formalities required for its enforceability under the laws of the State of New York;

the judgment was issued by a competent court either after proper service of process on the parties, which service of process if made in Brazil must comply with Brazilian law, or after sufficient evidence of the parties absence has been given, as established pursuant to applicable law;

the judgment is not subject to appeal;

the judgment has been authenticated by a Brazilian consulate in the State of New York;

the judgment has been translated into Portuguese by a certified sworn translator; and

the judgment is not against Brazilian public policy, good morals or national sovereignty.

In addition:

Civil actions may be brought before Brazilian courts in connection with this prospectus supplement based on the federal securities laws of the United States, and Brazilian courts may enforce such liabilities in such actions against Vale (provided that the relevant provisions of the federal securities laws of the United States do not contravene Brazilian public policy, good morals or national sovereignty and provided further that Brazilian courts can assert jurisdiction over the particular action).

The ability of a judgment creditor to satisfy a judgment by attaching certain assets of the defendant is limited by Brazilian law. In addition, a Brazilian or foreign plaintiff who resides abroad or is abroad during the course of a suit in Brazil must post a bond to cover the legal fees and court expenses of the defendant, unless there are real estate assets in Brazil to assure payment thereof, except in case of execution actions or counterclaims as established under Article 836 of the Brazilian Code of Civil Procedure.

Notwithstanding the foregoing, no assurance can be given that ratification would be obtained, that the process described above could be conducted in a timely manner or that a Brazilian court would enforce a monetary judgment for violation of the U.S. securities laws with respect to the notes.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights key information described in greater detail elsewhere, or incorporated by reference, in this prospectus supplement and the accompanying prospectus. You should read carefully the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference before making an investment decision. In this prospectus supplement, unless the context otherwise requires, references to Vale, we, us and our refer to Vale S.A., its consolidated subsidiaries, its joint ventures and other affiliated companies, taken as a whole.

We are the second-largest metals and mining company in the world and the largest in the Americas, based on market capitalization. We are the world s largest producer of iron ore and iron ore pellets and the world s second-largest producer of nickel. We are one of the world s largest producers of manganese ore, ferroalloys, bauxite and kaolin. We also produce alumina, aluminum, copper, coal, potash, cobalt, platinum group metals (PGMs) and other products. To support our growth strategy, we are actively engaged in mineral exploration efforts in 21 countries around the globe. We operate large logistics systems in Brazil, including railroads, maritime terminals and a port, which are integrated with our mining operations. In addition, we are building a maritime freight portfolio to transport iron ore. Directly and through affiliates and joint ventures, we have investments in the energy and steel businesses.

The following table presents the breakdown of our total operating revenues attributable to each of our main lines of business, each of which is described following the table.

	2007		Year Ended December 31, 2008		2009	
	US\$ million	% of total	US\$ million	% of total	US\$ million	% of total
Ferrous minerals:						
Iron ore	US\$ 11,908	36.0%	US\$ 17,775	46.2%	US\$ 12,831	53.6%
Iron ore pellets	2,738	8.3	4,301	11.2	1,352	5.6
Manganese	69	0.2	266	0.7	145	0.6
Ferroalloys	719	2.2	1,211	3.1	372	1.6
Pig iron	81	0.2	146	0.4	45	0.2
Subtotal ferrous						
minerals	15,515	46.9	23,699	61.6	14,745	61.6
Non-ferrous						
minerals and						
metals:						
Nickel(1)	10,043	30.3	5,970	15.5	3,260	13.6
Aluminum	2,722	8.2	3,042	7.9	2,050	8.6
Copper	1,985	6.0	2,029	5.3	1,130	4.7
PGMs(1)	314	1.0	401	1.0	132	0.6
Potash	178	0.6	295	0.8	413	1.7
Other precious						
metals(1)	113	0.3	111	0.3	65	0.3
. ,	374	1.1	420	1.1	215	0.9

Other non-ferrous minerals(2)

Subtotal non-ferrous						
	4.5.500		12.260	24.0		20.4
minerals/metals	15,729	47.5	12,268	31.9	7,265	30.4
Coal	178	0.5	577	1.5	505	2.1
Logistics services	1,525	4.6	1,607	4.2	1,104	4.6
Other investments	168	0.5	358	0.8	320	1.3
Total operating						
revenues	33,115	100.0	38,509	100.0	23,939	100.0

⁽¹⁾ Revenues included in the nickel product segment in our consolidated financial statements.

⁽²⁾ Includes kaolin and cobalt.

Ferrous minerals:

Iron ore and iron ore pellets. We operate three systems in Brazil for producing and distributing iron ore. The Northern and the Southeastern Systems are fully integrated, consisting of mines, railroads, a maritime terminal and a port. The Southern System consists of three mining complexes and two maritime terminals. We operate 10 pellet-producing facilities in Brazil, one of which is a joint venture. We also have a 50% stake in a joint venture that owns three pelletizing plants in Brazil and a 25% stake in a pellet company in China.

Manganese and ferroalloys. We conduct our manganese mining operations through subsidiaries in Brazil, and we produce several types of manganese ferroalloys through subsidiaries in Brazil, France and Norway.

Non-ferrous minerals:

Nickel. Our principal nickel mines and processing operations are conducted by our wholly-owned subsidiary Vale Inco Limited, which has mining operations in Canada and Indonesia. We own and operate, or have interests in, nickel refining facilities in the United Kingdom, Japan, Taiwan, South Korea and China.

Aluminum. We are engaged in bauxite mining, alumina refining, and aluminum metal smelting. In Brazil, we own a bauxite mine, an alumina refinery and an aluminum smelter. We have a 40% interest in Mineração Rio do Norte S.A., a bauxite producer, operations of which are also located in Brazil.

Copper. We have copper mining operations in Brazil and Canada. In Brazil, we produce copper concentrates at Sossego in Carajás, in the state of Pará. In Canada, we produce copper concentrate, copper anode and copper cathode in conjunction with our nickel mining operations at Sudbury, Thompson and Voisey Bay.

Fertilizer nutrients. We are Brazil s sole producer of potash, with operations in Rosario do Catete, in the state of Sergipe.

PGMs. We produce platinum-group metals as by-products of our nickel mining and processing operations in Canada. The PGMs are concentrated at our Port Colborne facilities, in the Province of Ontario, Canada, and refined at our precious metals refinery in Acton, England.

Other precious metals. We produce gold and silver as by-products of our nickel mining and processing operations in Canada. Some of these precious metals are upgraded at our facilities in Port Colborne, Ontario, and all are refined by unrelated parties in Canada.

Other non-ferrous minerals. We are the world s fourth-largest producer of kaolin for the paper industry. We produce cobalt as a by-product of our nickel mining and processing operations in Canada and refine it at our Port Colborne facilities.

Coal. We produce metallurgical and thermal coal through Vale Australia Holdings, which operates coal assets in Australia through wholly-owned subsidiaries and unincorporated joint ventures. Through our subsidiary Vale Colombia, we produce thermal coal in the Cesar department of Colombia. We also have minority interests in Chinese coal and coke producers.

Logistics services. We are a leading provider of logistics services in Brazil, with railroads, maritime terminals and a port. Two of our three iron ore systems incorporate an integrated railroad network linked to automated

port and terminal facilities, which provide rail transportation for our mining products, general cargo and passengers, bulk terminal storage, and ship loading services for our mining operations and for customers. We also have a 31.3% interest in Log-In Logística Intermodal S.A., which provides container-based logistics services in Brazil, and a 41.5% interest in MRS Logística S.A., which transports our iron ore products from the Southern System mines to our Guaíba Island and Itaguaí maritime terminals, in the state of Rio de Janeiro.

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The Offering

The following summary contains basic information about the notes and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the notes, please refer to the section entitled Description of the Notes in this prospectus supplement and the section entitled Description of the Debt Securities in the accompanying prospectus. In this description of the offering, references to Vale mean Vale S.A. only and do not include any of Vale s subsidiaries or affiliated companies.

Issuer Vale S.A.

Notes offered aggregate principal amount of % Notes due

Issue price % of the principal amount

Maturity March,

Interest rate The notes will bear interest at the rate of % per annum from March,

2010 based upon a 365-day year or a 366-day year, as applicable, and the

actual number of days elapsed.

Interest payment dates Interest on the notes will be payable annually on March of each

year, beginning March , 2011.

Ranking The notes are general obligations of Vale and are not secured by any

collateral. Your right to payment under these notes will be:

junior to the rights of secured creditors of Vale to the extent of their

interest in Vale s assets;

equal with the rights of creditors under all of Vale s other unsecured and

unsubordinated debt; and

effectively subordinated to the rights of any creditor of a subsidiary of

Vale over the assets of that subsidiary.

Covenants The indenture governing the notes contains restrictive covenants that,

among other things and subject to certain exceptions, limit Vale s ability

to: merge or transfer assets, and incur liens.

For a more complete description of these covenants, see Description of the

Notes Covenants in this prospectus supplement and Description of the

Debt Securities Certain Covenants in the accompanying prospectus.

Further issuances Vale reserves the right, from time to time, without the consent of the

holders of the notes, to issue additional notes on terms and conditions identical to those of the notes, which additional notes shall increase the aggregate principal amount of, and shall be consolidated and form a single series with, the series of notes offered hereby. Vale may also issue other

securities under the indenture which have different terms and conditions

from the notes.

Payment of additional amounts

Vale will pay additional amounts in respect of any payments under the notes so that the amount you receive after Brazilian withholding tax will equal the amount that you would have received if no withholding tax had been applicable, subject to some exceptions as described under

Description of the Debt Securities Payment of Additional Amounts in the accompanying prospectus.

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Optional redemption

Vale may redeem the notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed and a make whole amount described under Description of the Notes Optional Redemption in this prospectus supplement plus accrued and unpaid interest on such notes to the date of redemption.

Tax redemption

If, due to changes in Brazilian law relating to withholding taxes applicable to payments of interest, Vale is obligated to pay additional amounts on the notes in respect of Brazilian withholding taxes at a rate in excess of 15%, Vale may redeem the notes in whole, but not in part, at any time, at a price equal to 100% of their principal amount plus accrued interest to the redemption date.

Use of proceeds

We intend to use the net proceeds of this offering for general corporate purposes, including funding our capital expenditures, managing the currency and maturity profile of our liabilities, and potentially making acquisitions. See Use of Proceeds .

Listing

We have applied to list the notes on the Luxembourg Stock Exchange.

Rating

The notes have been assigned a foreign currency rating of by Moody s, by Standard & Poor s, by Fitch Ratings and by DBRS. Rating are not a recommendation to purchase, hold or sell notes, as ratings do not comment as to market price or suitability for a particular investor. The ratings are based upon current information furnished to the rating agencies by Vale and information obtained by the rating agencies from other sources. The ratings are only accurate as of the date thereof and may be changed, superseded or withdrawn as a result of changes in, or unavailability of, such information, and therefore a prospective purchaser should check the current ratings before purchasing notes. Each rating should be evaluated independently of any other rating.

Form and denomination

The notes will be issued only in registered form in minimum denominations of 50,000 and integral multiples of 1,000 in excess thereof.

Risk factors

See Risk Factors and the other information included and incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before investing in the notes.

Common Code

ISIN

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RECENT DEVELOPMENTS

For a discussion of our results of operations for the year ended December 31, 2009 and recent material developments, see our report on Form 6-K filed with the U.S. Securities and Exchange Commission on March 11, 2010.

RISK FACTORS

Our annual report on Form 20-F for the year ended December 31, 2008, which is incorporated by reference in this prospectus supplement and the accompanying prospectus, includes extensive risk factors relating to our business. You should carefully consider those risks and the risks described below, as well as the other information included or incorporated by reference in this prospectus supplement or the accompanying prospectus, before making a decision to invest in the notes.

Risks Relating to the Notes

There may not be a liquid trading market for the notes.

The notes are an issuance of new securities with no established trading market. There can be no assurance that a liquid trading market for the notes will develop or, if one develops, that it will be maintained. If an active market for the notes does not develop, the price of the notes and the ability of a holder of notes to find a ready buyer will be adversely affected.

We may not be able to make payments in euros.

In the past, the Brazilian economy has experienced balance of payment deficits and shortages in foreign exchange reserves, and the government has responded by restricting the ability of Brazilian persons or entities to convert reais into foreign currencies. The government may institute a restrictive exchange control policy in the future. Any restrictive exchange control policy could prevent or restrict our access to euros, and consequently our ability to meet our euro obligations and could also have a material adverse effect on our business, financial condition and results of operations.

In case of bankruptcy, we would be required to pay amounts only in reais.

Any judgment obtained against Vale in the courts of Brazil in respect of any of Vale s payment obligations under the notes would be expressed in the *real* equivalent of such sum. Accordingly, in case of bankruptcy, all credits held against Vale denominated in foreign currency would be converted into *reais* at the prevailing commercial exchange rate on the date of declaration of bankruptcy by the judge. Further authorization by the Central Bank of Brazil would be required for the conversion of such *real*-denominated amount into foreign currency and for its remittance abroad.

Developments in other countries may affect prices for the notes.

The market value of securities of Brazilian companies is, to varying degrees, affected by economic and market conditions in other countries. Although economic conditions in such countries may differ significantly from economic conditions in Brazil, investors—reactions to developments in any of these other countries may have an adverse effect on the market value of securities of Brazilian issuers. For example, in October 1997, prices of both Brazilian debt securities and Brazilian equity securities dropped substantially, precipitated by a sharp drop in the value of securities in Asian markets. The market value of the notes could be adversely affected by events elsewhere, especially in

emerging market countries.

Holders in some jurisdictions may not receive payment of gross-up amounts for withholding in compliance with the EU Directive on taxation of savings income.

Austria and Luxembourg have opted out of certain provisions of an EU Directive regarding taxation of savings income and are instead, during a transitional period, applying a withholding tax on payments of interest, at a rate of up to 35%. Neither we nor the paying agent (nor any other person) would be required to pay additional amounts in respect of the notes as a result of the imposition of withholding tax by any member state of the European Union or another country or territory which has opted for a withholding system. For more information, see Description of the Debt Securities Payment of Additional Amounts in the accompanying prospectus and under Certain Tax Considerations European Union Savings Directive, An investor should consult a tax adviser to determine the tax consequences of holding the notes for such investor.

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USE OF PROCEEDS

The aggregate proceeds of this global offering, net of fees and expenses, including underwriting discounts and commissions, will be approximately million. We intend to use the net proceeds of the global offering for general corporate purposes, including funding our capital expenditures, managing the currency and maturity profile of our liabilities, and potentially making acquisitions. We regularly review possible opportunities for strategic acquisitions, and in the current period of consolidation in the global mining industry, attractive new opportunities may arise and we could make one or more acquisitions, which could require a substantial amount of funding.

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CAPITALIZATION